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Plant Population Structure of Mt. Jeolyoung in Young-do Island

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The purpose of the present investigation was to investigate diversity patterns in a fragmented Young-do Island forested landscape. It was conducted on sloping 18 plots (twelve 50 x 50 m plots and six 10 x 100 m plots). Total 1562 trees were identified and measured in the 50 x 50 m plots. These were a total of 68 species and 23 families present in the three sites. Least significant differences (LSD) post hoc analysis revealed that fragments site A had significantly greater than densities than site B. Shannon-Wiener functions differed significantly among forests ($F = 4.12$, $p < 0.05$), with site A forest having significantly higher value (3.401) than the others (2.590 for site B and 2.648 for site C). *Pinus thunbergii* and *Quercus aliena* were the dominant habitat type on most sites. The *Pinus densiflora* forest of sites A and C is distributed better in the NE exposures compared with the opposite ones. *Ficus erecta* and *Pinus densiflora* largely occupied the southern exposures. The spatial distribution in southern Young-do Island's coastal littoral forest is very heterogeneous, reflected by most species having low densities and patchy distributions.

Key words: Young-do Island, Least significant differences, Shannon-Wiener functions